



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|---------------------------|---------------------|------------------|
| 10/597,960 | 02/23/2007 | Per Olof Magnus Magnusson | P19069-US1 | 8466 |
| 27045 | 7590 | 10/18/2010 | EXAMINER | |
| ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024 | | | CHACKO, JOE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2456 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 10/18/2010 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kara.coffman@ericsson.com
jennifer.hardin@ericsson.com
melissa.rhea@ericsson.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/597,960

Filing Date: February 23, 2007

Appellant(s): MAGNUSSON ET AL.

Ronald S. Liu
For Appellant

EXAMINER'S ANSWER

Art Unit: 2456

This is in response to the appeal brief filed 7/21/2010 appealing from the Office action mailed 3/26/2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application: Claims 1-5, 7-13, and 15-16 are pending and have been rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

Art Unit: 2456

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

Koskiahde (WO 03/047183 A1)

| | | |
|-------------|------------|--------|
| 6766165 | Sharma | 7-2004 |
| 20030153325 | Veerapalli | 8-2003 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. **Claims 1-5, 7-13, 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Koskiahde (WO 03/047183 A1) in view of Veerapalli et al. (U.S. Patent Pub. No. 2003/0153325 A1, hereinafter "Veerapalli") in further view of Sharma et al. (U.S. Patent No. 6, 766,165 B2, hereinafter "Sharma")

As to **claim 1**, Koskiahde discloses a system a data unit processing entity (fig.1, 30, home agent) in a data unit transmission network (fig.1) , said data unit transmission network associated with a plurality of network nodes (fig.1, 10, mobile node, 20, correspondent node) , said plurality of network nodes including routing nodes (fig.1, 30, home agent) and end nodes (fig.1, 10, mobile node, 20, correspondent node), said routing nodes being arranged to route data units over said data unit transmission network in accordance with a routing protocol (pg.6, 22-24), one or more of said end nodes being mobile nodes capable of accessing said data unit transmission network over more than one link (pg.6, lines 27-32; where mobile node can move from its home network to other links) , said network nodes being arranged to distinguish between a

Art Unit: 2456

first type routing address and a second type routing address in said data units (pg.2, lines 28-32; where mobile nodes usually have two routing addresses , one which is their home address and the other a temporary address), said first type routing address (pg.2, lines 28; static home addresses by which a mobile node is always identified) serving to identify network nodes and said second type routing address (pg.2 ,lines 23-30; where each mobile node has a temporary address called a care-of-address which identifies its current location) serving to allow routing to mobile nodes, said data unit processing entity comprising:

- a decision data memory storing decision data for associating one or more second type routing addresses(pg.7, lines 8-9, care-of-address) for a particular first type routing addresses (pg.7,lines 2-5; where the binding update is received by the home agent and associates the home address of the mobile node to its care-of-address) :

- a decision part for receiving a data unit that is to be forwarded and for setting a second type routing address (pg.7 , lines 8-9; care-of-address) in a said received data unit (pg.7,lines 2-4; where the binding update is received by the home agent described the care-of-address) that is to be forwarded,

Koskiahde does not disclose a system with a decision part set in said received data unit that is to be forwarded and on decision data stored in association with said first type routing address in a decision data memory and a management part for said decision data memory, where said management part provides an interface to said decision data memory for modifying said decision data.

In an analogous art, Veerepalli et al discloses a system wherein an operation of said decision part depending on a first type routing address ([0069]; where IP address is provided to the mobile node based on the registration request from a mobile node) set in said received data unit that is to be forwarded and on said decision data stored in association with said first type routing address in said decision data memory ([0071]; where the home agent stores information describing its mobile nodes so that it can route data to the mobile node),

- a management part further comprising:

a first interface to said decision data memory for modifying said decision data ([0058]; where a mobile node may change the information regarding its new care of address using a registration request message),

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify Koskiahde by incorporating a decision part for setting the second type routing address and a management part for said decision data memory as disclosed by Veerepalli. The rationale behind this modification is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

However, Veerepalli does not disclose a wherein for updating said decision data memory a network control function entity , a second interface to one of said mobile nodes for allowing said mobile node to modify said decision data over said first interface, and a third interface to said network control function entity allowing said network control function entity access to said decision data memory for modifying said decision data and wherein said second interface and said third interface are two independent and separate interfaces to said management part.

Sharma does disclose a system wherein a network control function entity (fig.3, 318, 320, NMS) for updating said decision data memory (column 13, line 62-column 14, line 17; the NMS server can store information in a access control list database and also store network topology in a view database);

a second interface to one of said mobile nodes for allowing said mobile node to modify said decision data over said first interface ,(column 10, lines 38-42; the mobile wireless device can communicate with the central NMS directly and network management capability is provided) and

a third interface to said network control function entity (column 10, lines 7-9; the central NMS communicates with the local NMS via a physical connection) allowing said network control function entity access to said decision data memory for modifying said decision data (column 10, lines 55-61; the Local NMS communicates and provides

Art Unit: 2456

network management capability over multiple networks and mobile devices) and wherein said second interface and said third interface are two independent and separate interfaces to said management part. (fig.3; the second interface for the mobile devices to the central NMS and the physical connection from the local NMS to the central NMS are independent)

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify Koskiahde- Veerepalli by incorporating a second interface from the mobile node to the central NMS and a third interface from the Local NMS to the central NMS to provide network management capabilities as disclosed by Sharma. The motivation behind this modification is that it allows efficient managing of networks, both ground-based and wireless, through a mobile capable device or wireless capable device management server. (Sharma, column 4, lines 25-33)

As to **claim 2**, Koskiahde- Veerepalli-Sharma does disclose the system wherein said decision data (Veerepalli,[0047]; “mobility bindings”) comprises decision rules(Veerepalli, [0047]; where “Care of Address” is used to route the data to the new location of the mobile node) and decision parameters(Veerepalli, [0047]; where “Lifetime” is the time period for the address will be valid), wherein said interface is arranged for modifying said decision rules and decision parameters. (Veerepalli , [0080]; where the home agent can detect and modify the mobility binding of the mobile node)

As to **claim 3**, Koskiahde- Veerepalli-Sharma does disclose the system said decision part is arranged to dynamically select one of said second type routing addresses (Veerepalli, [0075]; where the home agent has mobility bindings which contain one or more records for each device) from said decision data. (Veerepalli, [0076]; where the inactivity timer tracks the last time communication is received from node and then the home agent makes a decision accordingly)

As to **claim 4**, Koskiahde-Veerepalli-Sharma does disclose the system wherein said decision part is arranged to perform said dynamic selection for each data unit to be

Art Unit: 2456

forwarded. (Veerepalli ,[0075]; where the home agent has mobility bindings which contain one or more records for each device)

As to **claim 5**, Koskiahde-Veerepalli-Sharma discloses a system wherein said interface is arranged to provide a plurality of control functions (Veerepalli , [0071]; where the home agent stores information describing the mobile nodes to control flow of data) with access to said decision data memory.

As to **claim 7**, Koskiahde-Veerapalli-Sharma does disclose a system wherein one or more of said control functions are network resource management functions. (Veerepalli, [0071]; where home agent manages various kinds of resources to manage the network)

As to **claim 8**, Koskiahde-Veerapalli-Sharma does disclose the system wherein said network control function is arranged to determine parameters related to access links (Veerepalli, [0055]; where IP networks may be the Internet, an intranet, a private IP network) over which said mobile nodes access said data unit transmission network (Veerepalli, [0055]; wireless communication system), and to modify said decision data in dependence on said parameters related to access links. (Veerepalli, [0055] [0056]; the routing information concerning the different kinds of data across different links)

As to **claim 9**, this is a method corresponding to system in claim 1. Therefore it has been analyzed and rejected based upon system in claim 1.

As to **claim 10**, this is a method corresponding to system in claim 2. Therefore it has been analyzed and rejected based upon system in claim 2.

As to **claim 11**, this is a method corresponding to system in claim 3. Therefore it has been analyzed and rejected based upon system in claim 3.

As to **claim 12**, this is a method corresponding to system in claim 4. Therefore it has been analyzed and rejected based upon system in claim 4.

As to **claim 13**, this is a method corresponding to system in claim 5. Therefore it has been analyzed and rejected based upon system in claim 5.

As to **claim 15**, this is a method corresponding to system in claim 7. Therefore it has been analyzed and rejected based upon system in claim 7.

As to **claim 16**, this is a method corresponding to system in claim 8. Therefore it has been analyzed and rejected based upon system in claim 8.

(10) Response to Argument

(1)The Appellant argues that the cited combination of references, fails to disclose or suggest "a first interface to said decision data memory for modifying said decision data" (See brief, pg 5)

In reply to (1), the Examiner discloses that the Veerapalli reference clearly discloses the mobile node using care-of-addresses from the foreign agent . These care of addresses disclosed in the Veerapalli reference are the IP addresses of the foreign agents. The link between the mobile node and the home agent is the interface used to modify data regarding the location of device ([0047]). The mobile node uses these addresses in the registration request messages to manipulate the data regarding the node in the home agent. ([0058], [0059]) Therefore, the Veerapalli reference clearly discloses the system wherein a first interface(mobile node link to home agent) to said decision data memory (memory of the home agent device for storing location data) for modifying said decision data (location information) Thus the Koskiahde reference in view of the Veerapalli reference does disclose the limitation of the claim.

Art Unit: 2456

(2) Appellant argues that the cited combination of references, fails to disclose or suggest "a second interface to one of said mobile nodes for allowing said mobile node to modify said decision data over said first interface. (See brief, pg. 5)

In reply to (2), the Examiner states that the Sharma reference does disclose the mobile device communicating directly with the central NMS and therefore clearly discloses the second interface which is the link directly to the mobile devices. (column 10, lines 38-42) The Sharma reference discloses a Central NMS that communicates directly to the mobile nodes through an interface similar to the first interface disclosed in the Veerapalli reference. The Central NMS also discloses a management capability over assets on the network (column 10, lines 38-42). Therefore, the Sharma reference does disclose a second interface (direct link to mobile node) to one of said mobile nodes for allowing said mobile node to modify said decision data (mobile node location information) over said first interface (direct link from mobile node to NMS). Thus the Koskiahde reference in view of the Veerapalli reference in further view of the Sharma reference does disclose the limitations of the claim.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/J. C./

Examiner, Art Unit 2456

Conferees:

/KEVIN BATES/

Primary Examiner, Art Unit 2456

Application/Control Number: 10/597,960
Art Unit: 2456

Page 10

/Rupal D. Dharia/
Supervisory Patent Examiner, Art Unit 2400